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ABSTRACT

During the 2.5 years the project was in operation, the International Center for Culture and Environment (Santa Fe, New Mexico) provided courses concerned with aspects of intercultural communication related to environmental design and planning to students and practitioners from 15 U.S. states and 15 foreign countries. Courses were provided in three formats: semester-length courses, summer courses, and short seminars on selected subjects. Students in semester and summer courses spent about half their time working on field projects in Northern New Mexico. Several principles were incorporated into field work to increase relevancy in developing nations. These included community initiation of projects, community involvement, rapid research techniques, rapid problem definiton and cooperation, and establishment of an international network of information exchange. The need to market the program was identified along with other evaluation results that indicate the program was a qualified success. Appendixes include a formative evaluation of the project's first two years. (DB)

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FINAL REPORT:
A DOMESTIC/INTERNATIONAL FIELD CENTER FOR INTER-CULTURAL EDUCATION IN BUILT ENVIRONMENT

Project Overview

The Project started with the realization, on the part of the future Project Director, that almost no courses, programs, or training specifically oriented to international practice, were available to donors of professional services. Along with this realization, in 1982, came information indicating that this problem was particularly acute in the environmental disciplines: architecture, planning, urban design, impact analysis, environmental social science, etc. The practitioners in these fields are primarily responsible for determining the forms of the environments in which people live, work, and play. In recent years, these fields have "internationalized," and U.S. firms now do consultation and engage in professional projects abroad, especially in developing countries. Equally important, practitioners from one cultural group may work with people who are culturally very different, within the U.S.A.

The International Center for Culture and Environment (ICCE) (formerly called the International Center for Built Environment) was inaugurated in Santa Fe, New Mexico, in January, 1985, to address the above issues. FIPSE funding was received in December 1985, for three kinds of courses, all on aspects of intercultural communication related to environmental design and planning: semester-length courses, summer courses, and short seminars on selected subjects. During the 2-1/2 years that the project was in operation (there was a six-month break in early 1986, when the Project Director was teaching in Indonesia), students and practitioners from 15 states of the U.S.A. and 15 foreign countries took part in ICCE programs.

Participants ranged in age from early 20s to late 40s, and in educational level from advanced undergraduates to post-doctoral.

As anticipated, students in both the semester and summer courses spent about half their time working on field projects in Northern New Mexico, a site chosen because it represented the most culturally (and architecturally) diverse area in the U.S.A. During the period of FIPSE funding, this field work included projects in the Native American Pueblos of Isleta, Laguna, Santa Clara, and San Ildefonso, and in the Hispanic villages of Costilla, North San Ysidro, South San Ysidro, and Tierra Amarilla. Several principles were incorporated into this field work, which we felt were relevant to professional practice in developing areas of the world:

(1) reciprocity: the primary purpose of each course was education of the student, but students were expected to return to the community a useful final report of the project;

(2) community initiation of projects: in no case did we go to a community and say "you need thus and so." Directly or indirectly, project ideas were initiated by the communities themselves;

(3) effective participation: students were given an opportunity (in fact required) to practice techniques of effective and meaningful involvement of

communities in the design and planning process. This included, but was not limited to, a participatory process called "environmental modeling";

(4) rapid research: students were also trained in ways of gathering data about a community in restricted periods of time;

(5) rapid problem definition and cooperation: students were trained: (a) to work in interdisciplinary and international teams in order to offer solutions to community problems; and (b) to employ a specific process, developed by the American Institute of Architects, and known as the "Regional/Urban Design Assistance Team" concept (or "R/UDAT"), to generate a required product in a specified time;

Principles (1) - (4) were incorporated into all projects. Principle (5) was not fully employed in all of the subgroups in the summer, 1986 course (because of inadequate subgroup size) nor in the summer, 1988 course (because only one intern was involved). To the extent that these principles were also objectives of the project, two additional objectives were also achieved over the three-year duration of the project;

(6) the assembly of a library of resource materials on field research methods, culturally-appropriate technology, indigenous architecture and planning, intercultural communication, and technology transfer (including audio and videotapes);

(7) establishing an international network of information exchange relevant to this project.

Purpose

The problem issue addressed had two aspects: (1) the failure of architectural/planning programs designed by Western experts or inspired by Western designs to satisfy client/user needs in the developing areas of the world, including those within the U.S.A.; and (2) the virtually total absence of courses or education/training programs in the U.S.A. or elsewhere directed to intercultural communication for design professionals.

As work on the project progressed, it became clear that the range of our "client group" - environmental professionals - was much greater than had been imagined originally. Not only were we attracting architects, planners, and urban designers, but students and professionals from the fields of landscape architecture, impact analysis (social, cultural, and environmental), communication (intercultural and otherwise), anthropology, environmental psychology, Native American studies, etc. The incorporation of Dr. Laurence Moss into the Project in late 1987 enabled us to expand our future prospects to include cultural resources planning and strategic planning as two more professional areas to which our program could be made applicable.

The broad, implicit purpose of the project was, somehow, somewhere to complement the training that is offered in intercultural communication directed to international product sales with training oriented toward the role of intercultural communication in international professional practice and the delivery of professional services. In fact, it appeared (and still does) that

the human dimensions of international product sales and the offering of professional services are very different indeed. In architecture, for example, the latter often requires communication with international public-sector organizations (e.g., World Bank); foreign governmental bureaucracies, industrial leaders, and workers; and issues of material/labor delivery, scheduling, client/user needs, etc. Further, there is the element of teamwork, which we found to be critically important in that overseas consultants/practitioners are often required to work in international and interdisciplinary teams. Thus, the forms of communication toward which we addressed our program were expanded from intercultural communication to include interdisciplinary communication. Teamwork proved to be a problem even within a given culture/discipline: a typical architectural education, for example, trains students to work alone as "form-givers" (master designers); such students often experience difficulty even working with other architects!

Our approach, or model for the project, stressed that millions of dollars were not required for a Center such as ours; that, in fact, by the avoidance of huge expenditures on real estate and construction, and substantial outlays for service personnel, the training we offered could be done very economically. Since most public buildings (especially at institutes of higher education) are underutilized, especially during summer months, we experienced little difficulty in meeting the first criterion (including inexpensive student housing). The second criterion proved more difficult: the Project Director ended up having to accept a half-time salary for 3/4 time work, and as we began to computerize our information system, the half-time administrative secretary was not quite able to keep up the workload (cataloging individuals, universities, professional organizations, books and other resource materials, etc.). Also, operating as an "independent scholar," apart from the setting of a formal university, had both advantages and disadvantages: advantages included separation from university bureaucracy and its endless meetings and other constraints; disadvantages, in terms of being at a considerable distance from one's home institution (a typical situation for "field stations") included having to do one's own bookkeeping/fiscal records (payroll was handled by the University of Wisconsin), enrollments, communications, and other record-keeping activities. In truth, a project administrator working at least 3/4 time is probably required for such a project (See Appendix I). It is probably also essential, for maximal efficiency, to have a FAX system or equivalent means of rapid communication, in operation.

Background and Origins

Work on the "Domestic/International Center" (now called the "International/Intercultural Center for Built Environment") actually began three years prior to the commencement of FIPSE funding in September, 1985. A preliminary proposal for the Center was drafted in Autumn, 1982, and circulated to a number of academics and practitioners in architecture and planning. Revisions were made on the basis of the comments received and the revised proposal sent to several other individuals.

In January, 1983, a course entitled "Built Environment in the Developing World" was initiated at the University of Wisconsin-Milwaukee. The course

included a three-week field component, conducted in Mexicali, Mexico, and the experience derived from this course and from the annual meeting of the Association of Collegiate Schools of Architecture (ACSA) in 1983 (whose theme was "International Practice") were incorporated into a second revision of the Center proposal. Another ACSA meeting in the Summer of 1983 had the same theme, and the proposal was presented to the attendees, with enthusiastic response.

The "Developing World" course was continued in Autumn, 1983, when the need for a permanent field station was becoming increasingly evident. A foreign studies program conducted in Guanajuato, Mexico, and Santa Fe, New Mexico, in early 1984, stressed the comparative study of various influences upon Spanish colonial architecture in Mexico and the U.S.A. On the basis of this and earlier experiences, and an extended data-gathering process (The Urban Research Center at the University of Wisconsin-Milwaukee (UWM) had kindly provided a research assistant), a proposal was submitted to the Urban Corridor Consortium of the University of Wisconsin-Milwaukee, to conduct a symposium at the Wingspread Conference Center on the relationship of intercultural communication to design of the built environment. The symposium was held in October, 1984.

The current project director took part leave from UWM to begin setting up the International/Intercultural Center in December, 1984. Office space was acquired in downtown Santa Fe, New Mexico, and plans immediately initiated for a summer course in May-June, 1985. Ties that had been forged with the Institute of American Indian Arts during a 1982-84 consultancy period were further strengthened, and a roster of guest lecturers/seminar leaders/critics assembled. The summer course, accredited by UWM, was to be "self-supporting," that is, in place of the conventional tuition, the costs of running the course were simply to be divided among the students. An application for additional funding, submitted to National Association on Foreign Student Affairs for the provision of scholarships to foreign students, was approved. The summer course was essentially a "pilot" version of part of the program proposed to FIPSE. The final three weeks of the course were devoted to a studio/workshop on community design and planning, focussing on community centers for the Hispanic communities of North and South San Ysidro and housing for Laguna pueblo. The seven students in the course, some working individually and others in a team, produced analyses; programs, plans, and designs.

In July, the first of the short seminars for professionals was run, in Caracas, Venezuela in conjunction with the Twentieth Congress of the Interamerican Society of Psychology. The three-day seminar/workshop included architects, landscape architects, planners, anthropologists, sociologists, and psychologists from four different countries as well as urban squatters, among its participants. The seminar/workshop was both project- and skill-focused: the project was the design of a community center to serve the "Casalta" settlement on the edge of Caracas; the skill was the utilization of a participatory design process, especially devised for situations involving communication across cultural or socio-economic gaps, to generate ideas.

During August, 1985, after notification that the FIPSE proposal had been approved, various actions were taken to strengthen contacts established earlier, including the Pecos Conference Center (to further facilitate contacts with communities), various departments at the University of New Mexico, the

Institute of American Indian Arts (which had provided classroom space for the 1985 summer course and contacts with several Pueblo communities), the New Mexico State Department of Housing, "RECURSOS" (a Santa Fe organization offering short courses in art and architecture), and local architects, landscape architects and planners.

A file of architecture and planning case studies of professional practice in developing countries, for later instructional use, was begun. Case study approaches, traditional training tools in such fields as law, are quite new in architecture and planning and show particular promise for students interested in developing countries.

The Project Director joined the Society for Intercultural Education, Training, and Research (SIETAR), giving access to a network of people involved in intercultural communications. In order to strengthen appropriate academic connections within New Mexico, a proposal was drafted for stronger ties among the Institute of American Indian Arts, the School of Architecture and Urban Planning and the Latin American Center at the University of Wisconsin-Milwaukee, the Native American Studies at the University of New Mexico, and the FIPSE-supported International Center for Built Environment (now the International Center for Culture and Environment). As a result of a lecture delivered at Kansas State University (KSU) in May, great interest was expressed in the Center; one outcome was that a KSU faculty member brought a group of undergraduate students to Santa Fe in Summer, 1986, to participate jointly with other more senior students in the Center's summer course, thereby facilitating the "training of trainers" aspect of the course. This arrangement, discussed in August, was solidified in September.

Overall organizational support was shared by the Department of Architecture and the Urban Research Center at the University of Wisconsin, at the beginning, but the Department of Architecture "dropped the ball" early on. This has been typical of one of the peculiar aspects of this Project: some of the <u>organizations</u> (Departments of Architecture at major universities) that were originally enthusiastic about the Project, seemed reluctant to provide resources, course credit, or students once it was funded, even though a select number of their best students wanted very much to enroll in ICCE courses. This may be attributed to a retrograde shift in the philosophy of architectural education: a reversion from a concern with social and behavioral factors to "formalism," from an embryonic concern with culturally-relevant design to post-modern classicism, and from issues of effective professional practice to purely academic concerns. Even the University of Wisconsin at Milwaukee, once famous for its innovative work in Environment-Behavior Studies, has institutionalized its innovations: hence, after an initial, brief flurry of enthusiasm, little interest was generated among the faculty. We consider this trend to be nothing short of disastrous, given the needs of the profession.

In fact, although this program was designed primarily for architects, it turned out to be other environmental disciplines that were most enthusiastic. We received support <u>in kind</u> (primarily space and some services) from the Institute of American Indian Arts and the University of New Mexico. In addition, academic departments in a number of disciplines in the U.S.A. and four other countries have expressed interest in collaborating with ICCE, and in sending students to participate in future ICCE programs. As a result of

various dissemination efforts, described in a later section, the spread of interest in ICCE and its offerings have been slow but certainly sure.

Project Description

Since the Project, post-FIPSE, is still ongoing, this description is mainly in the present tense.

As the International Center for Built Environment was originally conceived, the target groups were to have been students and practitioners of architecture, planning, and construction engineering who worked, or planned to work in culturally different areas of their own or other nations. Indirectly, we expected that the program would assist people in developing areas as well by also providing training to students from developing countries who are enrolled in professional programs in U.S. universities.

The project involves offering three categories of courses, all of which had been inaugurated by January, 1987. The semester-length courses are designed for U.S. and foreign university students (upper level undergraduates and graduate and special students) and stress is placed upon experiential learning in the field (studio/workshop format). The summer-length courses are intended, in part, to train people (students and university faculty) how to train other people, such as professionals in developing countries. The short courses are primarily for in-service professionals; those employed in the architecture, planning, and construction industries who anticipate imminent assignments working overseas in markedly culturally-different settings. FIPSE funding also provided partial support for a set of "guest" seminar/workshop leaders each year.

Fairly intense interaction among students is an important aspect of semester and summer courses. This interaction is of three kinds:

(1) among students from different universities;

(2) between U.S. and foreign students;

(3) among students from different backgrounds, since project work is accomplished in multi-disciplinary teams. These classes are project-oriented, problem-focused and task-oriented, and use case studies. In the field work phase attempts are made to model "real world" operations as much as possible where multi-disciplinary cooperation is the norm.

This project, while directed primarily to upper-level undergraduates, graduate students, and practicing professionals, is global in scope in the sense that nearly half our students, while enrolled in U.S. institutions of higher learning, are from developing countries. As a result of the success of our efforts in the U.S.A., Universitas Parahyangan in Indonesia has proposed inaugurating an ICCE of Southeast Asia, to deal with the intercultural training of environmental professionals in that area. Similarly, the University of Papua New Guinea has shown interest in a joint effort directed to similar issues and problems in the South Pacific.

Since the only permanent project staff were the Project Director and the Administrative Assistant (both half-time), it was necessary to bring a number of consultants into each course. In general, these, as local experts (or experts in their fields, such as team-building), provided valuable information and guidance. In the case of the 1986 summer course, however, both too many trainers and too many consultants were programmed (see "Evaluation" section).

Deviations from the Original Design

It was originally envisioned that the major emphasis of ICBE would be the role of person-to-person intercultural communication in architecture and planning education. Our initial offerings, in mid-1985 and mid-1986, however, made it clear that much more was involved. Hence, both the spring semester course and the summer course now both stress teamwork, participatory design and planning, and rapid research and practice. As previously anticipated, both spring semester and summer courses include an extensive field work component.

The spring semester course now emphasizes the following (it should be noted that case studies play an important role):

1) Fundamental institutional relationships: development theory, dependency theory, impact assessment, concepts and models of development, etc.

2) Intercultural communication - the people-to-people aspect - as it affects and impinges upon international practice.

3) Transfer of technology and diffusion of innovation: this is concerned with the social and cultural impacts of technology, introduced into a Third World country by an industrialized nation.

4) Cognition of resources - this is related to transfer of technology/ diffusion of innovation, using the example of irregular/spontaneous urban settlement in major cities of the Third World.

5) Effective practice: the formation of international and interdisciplinary teams, rapid assessment (as practiced by the Institute of Development Studies at the University of Sussex, for example), rapid problem definition and solution (as exemplified by the American Institute of Architects, Regional/Urban Design Assistance Team Program, otherwise known as "R/UDAT").

6) The "Third" and "Fourth" worlds of development: developing countries and developing peoples; concepts of tribal societies lacking in political autonomy.

7) Participatory design and planning: we at ICBE have adopted the position that all effective communication involves effective public participation, and vice-versa. In this segment of the program we invite students to consider effective ways of intercultural participation, to view participation as a mode of people-to-institutions communication, and to explore non-verbal modes of participation/communication as an alternative to the orthodox public meeting or to survey research.

8) Field work. This is an essential part of both the semester and summer programs and is one prime reason for the location of ICBE in Northern New Mexico. As stated earlier Northern New Mexico represents what is probably the most culturally diversified rural environment in the U.S.A. Field work is normally done in a Pueblo or Hispanic community, with two requirements: (a) the community must request the services of a team composed by ICBE, and (b) reciprocity must be the cornerstone: in return for the education provided by the community, the students in turn provide the community with something of value.

In the summer course, a 6-week intensive program, less emphasis is placed upon development theories per se; in fact, half of the summer program involves a field project in a Northern New Mexico community. The summer program also includes several short field trips to significant historic and prehistoric settlements in Northern New Mexico.

Project Results

Phase I. Starting in September, 1985, several strategies for the operation of the International Center for Built Environment -- both its office operations and course offerings -- were laid out and implemented. These included:

"Marketing." Because the nature and thrust of the field courses was largely new, and because one objective was to appeal to a national (and eventually international) market, no single university could be regarded as the "sole source" of students. However, an attempt to "blanket" the country uniformly with mailings, at this early stage, seemed neither desirable nor feasible. Hence, five methods were used to contact students:

(1) Previous personal contacts with students and faculty, 1983-85, where the concept of the Center had been explained, and interested people were asked to leave names and addresses. This produced an initial list of some 200 contacts in the U.S.A. and abroad, all of whom were contacted by mail;

(2) Personal appearances by the Project Director, through invited lectures and informal discussion in October and November, 1985, in Departments of Architecture and Planning at California Polytechnic University, City University of New York, Rensselaer Polytechnic Institute, UCLA, and the University of New Mexico, and the University of Wisconsin;

(3) "Target Areas"; two sections of the country, apart from Wisconsin, were identified as likely candidates for intensive recruitment: the Southwest and the Northeast. Both have universities with considerable interest in international affairs and a large enrollment of potentially interested students;

(4) Materials were developed for a marketing "package," including a poster, informative flyer, descriptions of semester-length courses, summer courses, and professional short seminars, and application forms. In addition to mailings, complete packages were left at institutions visited.

Management. After the Center moved to a new and larger office in September, 1985, it became clear that establishment of a system for both office and project management and administration was absolutely essential, and

that this should take precedence over word processing per se. Therefore, a consultant from Resources for Community Alternatives was retained to draft a management plan. The first phase of this plan, designed to routinize office management as much as possible, was initiated in October.

Curriculum. Outlines of the summer and semester courses for 1986 and 1987 were drafted. A list of potential professional short seminar topics was assembled.

Learning Resources. A "customized" book of core readings was added to a mini-library of resource books, videotapes, and audiotapes.

Dissemination. Through national and international mailings and personal appearances in five states, dissemination has already begun. In addition, notices concerning the Center's activities were sent to The Planners Network, Participation News, and Development Forum.

Foreign Visitors. During September, October, and November, 1985, and from July through October, 1986, students, faculty and practicing environmental design specialists from Mexico, France, Israel, and Ecuador visited the newly-established Center. Word seemed to be getting around.

Other Address Lists. For purposes of further promotion and dissemination activities, address lists -- in addition to that mentioned under "marketing" -- are being developed. We were attempting to pinpoint the most appropriate Departments of Architecture, Planning, and Architectural Engineering, and related professional organizations. These lists included environmental design, architecture, landscape architecture, interior design, and urban design.

Short Seminars. Preparation for in-service professional seminars began in August, through the acquisition of a list of respondents to a survey of architecture, engineering and construction work by U.S. firms done abroad, commissioned by the American Institute of Architects. This was later supplemented with the membership list of the New Mexico Chapter of the American Planning Association. A visit to the headquarters of the American Institute of Architects (AIA)in Washington, D.C. in mid-November, 1985, yielded information on the professional development courses sponsored by the AIA, and how the potential offerings of the Center could be included. The AIA also suggested that a short seminar on international practice be offered at the 1987 annual meeting. In addition, we were able to obtain a list of architectural, engineering, and construction firms involved in a recent survey of international business activities, and thus constituting potential candidates for short seminars.

Phase II. From January through mid-June, 1986, the project director was involved in teaching in Indonesia, in accordance with an arrangement made in 1984, under a contract between World Bank Education Project IX and the Midwest Universities Consortium for International Affairs. This activity, which took place in the Department of Architecture at Gadjah Mada University in Yogyakarta clearly involved much intercultural communication and, while FIPSE funding was not involved, the experience gained was of great relevance to the FIPSE project currently underway.

During Phase II, continual contact was maintained between my base in Yogyakarta and both the Urban Research Center at the University of Wisconsin-Milwaukee and the Department of Architecture at Kansas State University, our first coordinating institution outside the University of Wisconsin. During this period, additional teaching materials were acquired, including the new, unique and exciting series of Culture Shock books (published by Times Books International, Singapore) for Southeast Asia, which contain exactly the kind of information most needed for courses on intercultural practice in built environment, presented in very readable form. Several new and potentially very valuable contacts were also established. One was with the Third World Teaching-Resource Center at the University of California-Santa Cruz; another with the Santa Fe Center, part of a $150 million project in Northern New Mexico, which will offer an International Studies Program, complementary to the program we are offering at the ICCE.

The Project Director also delivered the Keynote Address at the second International Built Form and Culture Conference held in Lawrence, Kansas in October, 1986. The first such conference attracted participants from fifteen countries representing a variety of disciplines. The subject requested by the conference organizers for this keynote address was "education for international and intercultural practice in built environment."

Steps were also taken to enhance the probability of the project continuing beyond the period of the grant. Three universities - the University of Wisconsin, Kansas State University, and California Polytechnic University - offered credit for the summer course, and City University of New York, University of Kansas, Virginia Polytechnic University, and the University of New Mexico indicated interest in granting course credit to their students for the courses. The Institute of American Indian Arts offered scholarships to Native American students for ICCE course work.

In early June, the Project Director was invited to visit a major Indonesian university in Bandung, Java to deliver a presentation on the activities of the International Center for Built Environment. An agreement was made to continue contact and exchange. This university is interested in starting a similar Center to serve Southeast Asia, modeled on ours in New Mexico. They also showed interest in sending some of their own faculty to the U.S.A. to study at the ICBE. Thus, not only did the period of time spent by the Project Director in Indonesia yield valuable material for the Program, but it attracted students from Southeast Asia who, through interaction with American students, increased the latter's intercultural knowledge, as well. Work began on a general "manual of international and intercultural practice for architecture and planning."

Phase III. ICBE's Intensive Summer Course commenced on July 1, 1986 and continued for six weeks through August 9. It was sponsored jointly, in terms of academic credit by the University of Wisconsin-Milwaukee and Kansas State University; the latter also supplied, by our invitation, an additional full-time instructor. The Institute of American Indian Arts of Santa Fe also provided scholarships for one Native American and one South American participant. Students were housed, at very low cost, in dormitories of the College of Santa Fe, and instructional space was provided, at no charge, by the Institute of American Indian Arts. Students were provided with an "orientation packet" to the area and the Summer Program (Appendix 1) and, upon arrival, with a set of

readings (Appendix 2). A total of 25 students participated in the course and all but two completed it.

The Summer Course was divided into two segments. The first consisted of lectures, discussions, workshops, and several brief field trips. Lectures and discussions were illustrated with slides and videotapes and concerned the nature of intercultural communication and its relation to vernacular architecture as well as an introduction to ethnographic methods (culture - general elements); and the history, cultures, and architecture of the Northern New Mexico (culture - specific elements), which provided both the "setting" for the Field Course and the "case studies" for the second segment. Field trips included visits to local examples of innovative architecture, Chaco Canyon, and the sites of later field work. A two-day workshop on team building and conflict resolution was also held during the first three weeks.

The second segment of the Summer Course was devoted to field work in several locations, and studio/workshop. Students divided themselves on the basis of preference, into two groups: one worked with the Hispanic Community of North San Ysidro, San Miguel County, and the other, further divided into three sub-groups, worked with three Pueblo Indian families on two Pueblo Reservations. Of the two projects, the North San Ysidro Community Center was the more successful. After initial field reconnaissance, the North San Ysidro team employed a technique of participatory planning called "environmental modeling" to elicit the community's concepts of what they wanted a Community Center to do, ideas for physical design reusing two old abandoned school buildings, and the surrounding site, and basic community values that would effect design and use of the Community Center. At the beginning of the fourth week of the Summer course, a system was introduced for the rapid definition of environmental design problems and the formulation of initial solutions. This system, called "R/UDAT" (for "Regional Urban Design Assistance Teams") had been developed by the American Institute of Architects in the 1960s to help communities having limited resources with issues of environmental design, but had been used as an educational tool only twice before. Its use in this situation had several objectives: (1) to induce the team to work <u>as a team</u> -- teamwork is always a problem; (2) to train students in a technique, an approach to design and planning, which they could also apply in other situations, on other occasions; (3) to produce a solution to the North San Ysidro problem within a very constrained time frame; and (4) to "train trainers," to begin to teach students, through a "hands on" process, how to train others in the R/UDAT process. Toward the fourth objective, two students were selected by the team itself as team leaders.

The very intensive R/UDAT process took four days. At the conclusion of that period, the students had produced (1) a completed report for North San Ysidro (2) a grant proposal for submission to the State for a CDBG or NMCA grant to fund construction of the Community Center and (3) a record of the process, in the form both of photographic slides and diaries, which was assembled into a "show" for presentations illustrating how the team worked and accomplished its objectives during 1986.

The three Pueblo teams also used the environmental modeling process to communicate with the Pueblo families, on the Santa Clara and San Ysidro Reservations, with which they worked. This process helped the teams in communicating with their Pueblo clients. However, communication difficulty

resulted in some frustration, and a generally lower level of morale than that of the North San Ysidro team. Because the R/UDAT process requires a critical mass of "professionals" (the role played by the students) and because the Pueblo house design teams were relatively small, it was not possible to introduce the R/UDAT process to them. The course evaluations indicated that the field work portion of the summer course was, overall, a less positive experience for the Pueblo teams than for the North San Ysidro team. Nevertheless, three reports on Pueblo housing were completed indicating some degree of success at incorporating aspects of Pueblo culture into house design.

Both projects involved some "follow-up", and two students showed their dedication by continuing to work on the North San Ysidro Community Center grant proposal after the formal termination of the course. This proposal was submitted through the New Mexico Community Assistance (NMCA) program and evaluated, together with many other such proposals, by a State review staff. The proposal generated by the students was ranked 4th of 49 finalists (but, for political reasons, not funded by the State). The North San Ysidro Community Center report was presented to the Community, and is now forming the basis of the Community's own efforts to secure funding.

One of the Pueblo projects remained incomplete until October 30, 1986, and the project reports were therefore not presented to the Pueblo families involved until November 3.

Phase IV. Phase IV consisted of the Spring Semester, 1987 course, which commenced in January, 1987. To simplify logistics, the course site was moved to Albuquerque, and run through the Department of Architecture and Planning at the University of New Mexico. This semester-length course emphasized the eight elements mentioned under "Deviations from the Original Design." This approach utilized case studies, and guest lecturers and seminar leaders liberally.

The field project was a plan and design for upgrading the Isleta Pueblo Day School (see our Annual Report to Fund for the Improvement of Post-Secondary Education: Second Year, submitted to FIPSE at the Annual Meeting of Project Directors in December, 1987). This was done at the request of, and with the full cooperation of, school officials and the tribal council. They were both intrigued by and interested in our group, which consisted of eight fully enrolled students and one auditor. The students came from the U.S.A., Mexico, Australia, Indonesia, and Wales. This group of students worked together very well and produced what we consider to be an excellent project report as a final product of this semester-length course.

Phase V. Phase V consisted primarily of dissemination activities and a tutorial at the University of New Mexico. Newspaper articles about ICCE's FIPSE-supported activities appeared in the Albuquerque Journal, the Santa Fe Reporter, and New Mexico Business Opportunities News. Presentations were made at the Massachusetts Institute of Technology, Oxfam-America, the University of Colorado at Denver, the City University of New York, and, more informally, at several institutions in Britain: the University of Surrey, the Bartlett School of Architecture, the Institute for Development Studies at the University of Sussex, and, via an intermediary, at the University of East Anglia. In addition, presentations of our FIPSE-supported work were given at a special

conference of the Soil Conservation Service of the U.S. Department of Agriculture, at an Iowa State University conference on teaching for international practice, at the annual Association of Collegiate Schools of Planning meeting (1987), at the annual meeting of the Society for Intercultural Education, Training, and Research, at the Nineteenth Congress of the Environmental Design and Research Association, and at the Spring meeting of the Alliance for Learning at the Pecos River Conference Center in New Mexico. In addition, the Project Director was also the primary organizer of a conference entitled, "Conexiones," bringing together experts in community and regional planning from both the U.S.A. and Mexico, in early 1988.

During the same period, over 1,200 brochures and packages of information were sent to individuals, organizations, and universities throughout the world.

Phase VI. Phase VI consisted of a summer internship for a single student, a Cuban-born Landscape Architect from the University of California-Davis. The Project involved an Hispanic community in Northern New Mexico: Tierra Amarilla. Several visitors, including one from Ireland and another from Israel, also participated. The community, or campamiento, was established to secure Hispanic land rights over an area of approximately three square miles. The project was the design for a community cultural center, whose form and function were to be established through a process of participatory design, using the techniques of "environmental modeling," described earlier, and the "location test," introduced by Arie Peled, from the Technion in Israel. A follow-up assessment of the product of this summer internship will take place at the end of 1988.

Phase VII. Phase VII consists of post-FIPSE activities: those which have taken place during Fall, 1988, and planned for the first part of 1989. In October, lectures concerning the FIPSE-supported project were delivered at the University of Colorado at Boulder and at the University of California at Davis. In early 1989, the techniques and results of the FIPSE-supported project will be presented in a workshop at the University of California at Davis, at another workshop at North Carolina State University, Raleigh, and at the Twentieth Congress of the Environmental Design Research Association. In early April, 1989, we project a presentation at a conference to be held in Santa Fe, entitled, "Collaboration in Practice: Anthropologists and Others." In mid-April, 1989, the Project Director will assume the Enrique Aragon Chair of Psychology at Universidad Nacional Autonoma de Mexico, for a period between six months and a year, to help Social Psychology faculty there to organize a new program in Environmental Psychology. As this new program is to have an intercultural emphasis, experience gained through the 1985-88 FIPSE-supported project will be of great value. In addition, this provides one more opportunity to disseminate the methods and results of the FIPSE project to a large group of educators.

Reports resulting from each of these phases of the project have been sent to those who have expressed special interest; additional copies are available at cost from ICCE.

Evaluation

Three evaluations of various aspects of the project were conducted. Two of these are summarized here: the evaluation of the first and third years. The much more lengthy evaluation conducted just after the end of Year II is included as Appendix II.

Evaluation: Phase I. Phase I (Fall, 1985) saw the accomplishment -- or partial accomplishment -- of several short-term objectives. A poster and brochure were created, and address lists of students and academic colleagues prepared. An address list of professional organizations in architecture, planning, engineering, and related fields was begun, but not completed: work on all these address lists is continuing at present. Student recruitment and information dissemination trips were taken to universities in New Mexico, California, Pennsylvania, and New York. Telephone and mail contacts were established with a number of other institutions.

Evaluation: Phase II. During Phase II (Jan.-June, 1986) contacts were established with several institutions in Southeast Asia. A curriculum was drafted for the summer course and an outline prepared for a manual/textbook on intercultural communication in environmental design and planning. Further, the experience of working and communicating in a new cultural and physical environment provided additional experience and additional case study materials relevant to future course offerings.

Evaluation: Phase III. Phase III (Summer, 1986) was evaluated using a "standardized" set of evaluation forms developed in early August. The results were mixed, indicating a qualified success. In general, students seemed to feel that the most effective parts of the course were the exposure to team work ("hard, but rewarding"), interactions between students of different backgrounds, working closely with a small community (for the North San Ysidro group), the R/UDAT process, field trips, and the uniqueness of the culture area. The least effective parts appear to have been the overall organization (largely produced by having two principal instructors -- a "tight" organization had been carefully planned, but could not be followed), insufficient clarity and specificity of goals for so intense a schedule, some aspects of logistics (including transportation and certain items of equipment), certain issues of student interaction, and collaboration between designers and social scientists (improved over earlier attempts by others, but still presenting much room for improvement).

Concerning numerical rankings, on a scale ranging from 1 ("poor") to 5 ("excellent"), instructor rankings were 4.0 for David Stea and 3.0 for Lefferi Pavlides, overall. All contributions of the course were rated above average with the exception of "introduction of new skills" (rated 2.6). The last was disappointing, since this was an important aspect of the course, and correcting this problem is currently a major focus of attention. Having a smaller group of students and a single principal instructor has helped.

The field trips were popular, and regarded as very informative. Guest instructors were highly regarded and highly rated. Having two principal instructors enabled admitting a relatively large number of students, but it emerged, after the first week, that the two resident instructors espoused somewhat different philosophies and attitudes toward field research. This

undermined the effectiveness of the collaborative teaching effort and rendered the body of students a greater load than it would otherwise have been.

Most students found the film/slide presentations interesting and useful, and some of them also appreciated the extensive collection of reserve readings. The custom-assembled texts were less successful. Students indicated that the texts would have been more useful if they would have received them before arriving in New Mexico. The texts covered four areas: general aspects of intercultural communication, New Mexico Hispanic Society, New Mexico Pueblo society, and Chaco culture. All students received the general text upon arrival, an Hispanic or Pueblo text upon choosing a field project, and the Chaco culture book just before departing on the Chaco field trip.

In summary, then the 1986 summer course was evaluated as a qualified success: it seems to have worked well for about 60% of the students involved and somewhat less well for the remaining 40%, to have generated successful experiments with at least one technique of intercultural communication and one of team function appropriate to international practice, and to have produced products which are useful to the communities involved.

Evaluation, end of Year II (1987): (see Appendix II).

Evaluation of Summer Internship, Late 1988. During Summer, 1988, partly due to the Project Director's illness, a full-fledged Summer course was not held. Instead, as mentioned earlier, the Project Director took on an intern, a graduate student in landscape architecture from the University of California at Davis. An informal evaluation was conducted by the Project Director at the end of August, 1988. The internship appears to have been both satisfactory and effective in at least two aspects: (1) the intern reported that the internship had contributed greatly to her knowledge of, and ability to communicate meaningfully with, rural Hispanics of Mexican ancestry concerning issues of environmental design and planning. She stated that it had also provided considerable information potentially useful in her area of educational and professional specialization: the international practice of landscape architecture. (2) in accordance with our principle of reciprocity, residents of the community which constituted the field study site were also queried. These indicated that their ability to conceptualize what a "cultural center" should be had been markedly facilitated by the intern's presence, her participation in community life, and the design exercises which she conducted with members of the community.

A copy of the report which resulted from the summer internship is being sent to FIPSE under separate cover.

Evaluation of Resource-Building and Dissemination Activities, 1985-88

Our library of books, reports, audiotapes, and videotapes has been greatly increased, thanks to FIPSE support, and we have been able to assist many people and institutions, interested in applied aspects of intercultural communication, since early 1985. Perhaps naturally, the supply of resources has increased faster than our ability to acquire them; nonetheless, we now apparently have a reputation as one of the most complete sources of information on intercultural communication applied to the environmental professional in the U.S.A.

Our dissemination activities, pursued through personal and telephone contacts, through visits to universities, other institutions, conferences, seminars, etc., has reached areas of the eastern, midwestern, western, and pacific regions of the U.S.A., Great Britain, the Caribbean, Southeast Asia, and elsewhere. Future dissemination activities will be conducted in Latin America. We have no solid basis, at present, to evaluate the long-term effectiveness of these activities, but inquiries from both inside and outside the U.S.A. have been increasing in number and frequency during late 1988, in comparison with earlier Fall seasons.

Summary and Conclusions

In the realm of environmental design and planning, and related environmental specialties, effective international practice now appears to require, beyond technical abilities, at least the following: (1) the ability to work in intercultural, interdisciplinary teams; (2) knowledge of ways to encourage and to implement effective public participation; (3) flexibility, in the collection of information in the field, in working with partial data, and in preparing the final product; and (4) the ability to conduct a clear and effective community presentation. Thus, our idea of what constitutes intercultural communication in the context of the delivery of professional services was broadened to include the above, as well as innovation diffusion and technology transfer. Other practitioners interested in this project need to consider, not just the above, but, if they are "inter-institutional" (as ours was, incorporating students from many different universities), the issue of how and when to recruit appropriate participants: this proved to be more complex than originally anticipated. This is the "marketing" aspect.

APPENDICES

I. Information for FIPSE.

II. Evaluation of the first two years.

III. Report of 1988 Summer Internship (following under separate cover).

Appendix I.

(1) First, it is essential to state that FIPSE support of this project enabled experimentation with, and evaluation of, both innovative content and modes of teaching which would have been difficult, if not impossible, to try out under any other format. The assistance, questioning, commentary, and encouragement of the FIPSE evaluator, prior to funding, was of inestimable help in making the project "workable" and eventually, we feel, successful.

Unfortunately, after the project was begun, it was often difficult to contact FIPSE staff to obtain answers to questions, or resolutions of some "sticky" issues. Facilities for post-funding communication between FIPSE and Project Directors need to be improved. On the other hand, the yearly Project Directors' Meetings were exceptionally valuable for exchange of information, "moral support," and the generation of new ideas.

(2) In this era of increased international consciousness and an increasingly global economy, intercultural communication is of obvious importance. The application of this to the delivery of professional services -- to students in professional schools of our post-secondary institutions of learning -- is certainly an emerging new direction, especially considering the apparently increasing number of projects in this area which FIPSE has been funding between 1985, when this project started, and 1988. We feel that our effort has been successful, but that the workload placed on a team consisting of one half-time Project Director, and one half-time Administrative Assistant, was simply too great at times. As the scope of such projects enlarge to include other areas of professional specialization, and if future projects of this kind are proposed to FIPSE, increased faculty and staff time may be required.

We were also handicapped by an uncooperative attitude on the part of the Architecture Department at the University of Wisconsin-Milwaukee (UWM) which, having supported the project during its pre-proposal and proposal phases, withdrew support after it was funded and even withdrew credit for the Summer course after August, 1987. On the other hand, the co-sponsor, the Urban Research Center (URC) at UWM was both helpful and supportive throughout all phases of the project. We wish, therefore, to extend our appreciation to URC's Director and staff.

APPENDIX II

ADDING A NEW PERSPECTIVE TO ARCHITECTURAL AND PLANNING STUDIES

A Formative Evaluation Report on
the International Center for Built Environment, Santa Fe, New Mexico

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EXECUTIVE SUMMARY

This formative evaluation report comments on the International Center for Built Environment's training activities, role as a resource center, marketing of services, and overall organizational matters. Not included are comments on the Center's budget and how FIPSIE funds have been allocated. Some mention is made of necessary future expenditures but only in general terms as they apply to overall operation of an independent ICBE.

In each section, attention is given to what results have been obtained by the Center over the past two years of FIPSIE funding but even more attention is given over to suggestions for the future as it would be a waste of resources to only evaluate past activities and ignore the Center's future. The best way of summarizing the findings is to list the recommendations under the four broad headings which are used to organize the report.

ICBE AS AN EDUCATIONAL INSTITUTION

1. Provide a succinct, highly pertinent reading list and orientation materials in advance of the courses.

2. Establish an evaluation mechanism at the beginning of the workshop to ensure that small issues and problems are not magnified by inattention.

3. Document present course field projects with slides and/or video to aid introducing the project concept to the new participating villages in subsequent years.

4. Refine the final course evaluation instrument so that it is possible to have a mixture of scaled ratings and qualitative remarks.

5. Consider hiring a past workshop participant to serve as an assistant course leader, especially in the field trip and team project phases of the workshop.

6. Pay particular attention to the team-building, participant dynamics of the course.

7. Make sure participants understand why an activity is part of the course by using some form of advance organizer—handout, brief discussion, video/slide presentation.

8. Continue offering semester courses for undergraduates and, especially, graduate students in built environment professions.

9. Consider the creation of a series of course modules which could be used for a variety of training situations from existing undergraduate and graduate courses to professional seminars.

10. Continue developing and promoting the continuing education, inservice workshop for practicing professionals.

ICBE AS A RESOURCE CENTER

11. The ICBE should compile a list of current periodicals most relevant to its activities, obtain subscription details (including past issues/microform information), and determine which libraries in the Santa Fe area carry these publications.

12. In a similar exercise, the ICBE should compile a bibliography of books and nonprint materials which are of value for built environmental scholars and professionals wishing to gain knowledge on their own about cross-culturals aspects of the built environment.

13. Development of ICBE's existing master contact and mailing list should include the ability to sort people into sub-networks such as geographic area specialties, various engineering categories, architects, marketing only, past participant, third world individual, etc.

14. Print and nonprint documentation of cross-cultural built environment planning should be fostered by encouraging past ICBE course participants to describe/photograph projects they are engaged in and then submitting the results to the Center for its resource collection.

15. The existing plan to publish a newsletter should be activated as soon as feasible as an information device as well as an aid to fund raising and marketing.

16. The sponsorship of monographs and case studies by the Center should be considered--in cooperation with another institution if funding is too difficult.

MARKETING OF SERVICES AND MATERIALS

17. The Center should immediately develop a comprehensive marketing plan which identifies the several target audiences, how to reach them, and how much time, effort, and funds should be devoted to marketing.

18. Emphasis should be placed on the word-of-mouth, personal contact marketing approach as this is the most developed, cheapest, and most cost effective marketing method available to the Center.

19. Potential new markets should be identified, followed by a systematic strategy for reaching these new markets.

20. Consideration should be given to upgrading existing materials so that a clear "image" of the Center is established.

21. Specific consideration should be given to marketing the Center's services and materials to private firms engaged in overseas work.

22. As not all of these activities can be accomplished by a director and a half time associate, the marketing plan should specifically provide for an estimate of how much time might be required for a marketing/network facilitator, what skills would be needed by such a person, and how much this person would be paid.

MANAGEMENT, LOGISTICS, AND ADMINSTRATIVE

23. Several categories of management plans are required as the Center makes the transition to an independent non-profit educational center: a fund raising plan, a marketing plan, a financial plan, and an office mangement plan.

24. As part of the overall planning for an independent center, the role of the present half time administrative assistant should be carefully reviewed with strong consideration given to expanding the job description and renaming the position "Executive Officer" to more accurately reflect the nature of the work.

25. With the expansion of fund raising and marketing activities, support personnel may be required on a casual hourly, contractual, or other basis. However, no additional permanent staff should be hired at this time.

26. Registration as a non-profit educational corporation will require designating a board of directors. This should be seen as an opportunity for having regular input and reflection from the equivalent of an advisory board assisting the staff in carrying out Center objectives.

27. With expansion of audiovisual materials to support courses, purchase of basic audiovisual equipment and relevant materials is advised as a means of ensuring their use when borrowed equipment is not available.

28. Similarly, expansion of the computer facilities should be considered including the purchase of a modem and communications software for access to telex and electronic mail facilities.

29. Telephone needs should be studied with an eye to adding convenience services and a possible second line if funds permit.

30. A physical facilities needs survey should be carried out with an eye to improving storage, work space, and informal meeting accomodation.

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INTRODUCTION

"Architects should have to live and work in their creations--let them suffer the bitter fruits of their follies like we have to". (Disgruntled Client). Having worked with architects and construction engineers on educational projects in Africa and Asia, I was delighted to learn of the International Center for Built Environment's efforts to encourage architects, engineers, and planners to consider the cultural setting and client values when designing structures and planning living/working environments. Thus, I am clearly biased toward the concept of the Center and hope that this report can be of some small assistance in furthering its objectives.

The ICBE operates on the "university without walls" model, providing valuable educational services in a highly cost-effective manner using modern organizational methods while still maintaining traditional academic standards of excellence. Santa Fe and northern New Mexico offer a near-ideal setting for this endeavor. Consciousness of history, a diverse cultural mixture, concern for the environment, and interest in design are elements which make the city and surrounding area unique in the USA and similar to many developing nations. Santa Fe is also a place which tolerates new ideas and ways of solving problems within cultural dimensions. The physical surroundings are pleasing to most—1.3 million annual visitors bear out the attraction of the "City Different". Thus the selection of Santa Fe as the site for the ICBE matches the overall goals of the Center—a critical decision for long term success.

This is a formative evaluation report, conducted during the early part of the ICBE's third and final year of FIPSE funding. My orientation is to look at the lessons learned in the first two years, comment on these lessons, and make planning suggestions for the final year and beyond when the ICBE is expected to be an independent educational center. Stress is placed on positive and constructive recommendations for the future based on the experiences of the past two years.

Forming the background for the Center and this report are the project proposal's six major, long range objectives:

> "1. To improve the quality of [design and planning] work done abroad or in certain regions of the U.S.A.--which we call developing areas—by both people born in the U.S.A. and those from the developing areas themselves; this applies equally to North Americans working in Nigeria, Mexicans working in Mexico, or Israelis working in Peru; and to Wisconsin-born 'Anglos' or Los Angeles-born Navajos working on Indian Reservations within the U.S.A.;
>
> 2. To train students of built environment and related disciplines in techniques that are less culturally-disruptive and which do not increase the dependency of developing peoples on foreign sources and materials;
>
> 3. To train students in techniques that increase local control over design/planning decision-making (participation);
>
> 4. To train students in inter-cultural training required for the above;
>
> 5. Eventually, if the above are achieved, to extend this kind of training to students in professions other than built environment, professions for which tailored intercultural training is not yet available.;

6. ...[to] increase the international consciousness—in both an ethical and marketing sense—of the environmental professions. One likely result, then, will be increased opportunities for those who complete this program to obtain positions in which they can exert a favorable influence upon the nature and directions of international practice in the fields of architecture, planning, and construction engineering."

All of the long range objectives cannot be readily evaluated after two years of operation but several specific interim questions can be answered. Specifically, I have tried to answer five key questions reflecting the overall operation of the Center:

1. Has the ICBE been effective as an educational center?

2. How is it as a resource center?

3. How effective are the logistics and management of the ICBE?

4. What steps are required to make a successful transition from primarily FIPSE funding to a self-supporting educational center?

5. What steps can be taken to enhance the local, national, and international appeal of the center?

Information has come from project documents, student evaluations, and individuals associated with the ICBE.

PART 1. EFFECTIVENESS AS AN EDUCATIONAL CENTER

The ICBE has offered three types of educational courses: a semester-long offering at the University of New Mexico in Albuquerque, a summer workshop based in Santa Fe, and short courses for continuing education of professionals held in the USA or international settings such as Barbados. The course director in each case has been the ICBE director, David Stea. A variety of resource people have participated in all of the courses. The participants have been from a number of countries. Clearly the Center has been successful in organizing and presenting courses for a variety of built environment professionals, both degree seekers and established architects/engineers/planners.

Summer course. The keystone course has been the six week summer workshop which has been offered for the past two summers in Santa Fe with site and field trips throughout northern New Mexico. With participants living in a dormitory wing of the College of Santa Fe, working as teams rather than individuals, and engaged in multidisciplinary planning and design tasks, the summer course is an exercise in the process of learning cross-cultural communication and participatory planning practically as well as in theory.

From January to June, 1986, the course planning was hampered by the prior commitment of David Stea to be visiting professor at the University of Gadjah Mada, Yogyakarta, Indonesia, under a World Bank-funded project for institution strengthening. In the short run, this meant that the part-time administrative assistant, Barbara Riley, was responsible for much of the course logistics and organizational detail with key decisions made via air mail and transpacific telephone calls. Prof. Stea returned one week prior to the course opening.

In the long run, ties with Indonesian professionals were established, especially with the Parahyangan Catholic University in Bandung. These contacts resulted in several Indonesian students participating in the University of New Mexico spring semester course, 1987, offered in conjunction with the ICBE. This type of professional and training cooperation seems possible and should be continued.

An additional complication became clear in the first months following announcement of the FIPSE grant in August, 1985. The actual grant was awarded to the Urban Research Center and the School of Architecture and Urban Planning of the University of Wisconsin in Milwaukee. Thus the financial management was divided between Milwaukee and Santa Fe, a large university bureaucracy and a two person office which in fact was performing the educational operations.

Twenty five students enrolled in the 1986 summer course; 23 completed it. The project's Annual Report for FIPSE Year 1 (9/85-8/86) provides a summary of the students' evaluation plus candid comments of the project director (pp.13-14). There is no effort to hide the fact that the reviews were mixed.

The Center did not anticipate the effect on the total group of several participants who were out-of-phase with the course objectives and/or had a personal agenda at variance from the course leadership's. These few wielded influence on some of the other participants who otherwise might not have reacted to minor conflicts with resource leaders' values, participatory teaching approach, and occasional organizational shortcomings. However, in the intense setting of the workshop, especially sharing the same floor of the dormitory, a magnification of issues could occur--and did in 1986 (but not 1987). A means of defusing the inevitable problems had not been adequately built into the course organization. Also leadership of the

workshop was shared, but the co-leader's approach and style were in conflict with the project director's--a recipe for difficulties.

One major difficulty was trying to have three field projects for three teams which would have equal challenge, require about the same amount of time, and sustain roughly the same effort. A key learning vehicle in the workshop is the identification and successful working up of a design project at a real site. It is imperative that the project be one which can fit within the time and talent constraints of the workshop while being worthwhile for the host community.

All of these various problems were realized in the 1986 summer course and a number of corrections made for 1987. The size of the workshop was cut by two thirds; there was one course director/leader; one project rather than three was worked on; greater attention was paid to organization and time was spent defusing problems before they were magnified out of proportion. Resource people were better informed about the workshop's objectives and there was better information flow to the participants in advance of the workshop.

A key part of both the summer workshops has been the field trips to Chaco Canyon and other examples of historical Native American and Hispanic building design. These seem to have been quite successful despite the logistics of camping and group travel.

Not having observed the sessions, it is difficult to provide many insightful comments beyond those made by the participants in their evaluations. The mixture of learning strategies--indeed the overall workshop curriculum model--seems quite sound. However, several recommendations about the planning and conduct of the course which would strengthen future workshops using the same model can be made.

Semester course. The interim evaluations by six of the students taking "Intercultural communication and international practice in built environment" at the University of New Mexico were solidly positive. Several offered constructive comments and criticism normal to courses which have diverse students and which are highly participatory. The project director indicated that there are difficulties in "locating" the course within the university--the traditional "not invented here" problem which thwarts so many creative endeavors in universities (particularly state-supported) and elsewhere.

Introducing intercultural communication courses into the programs of environmentally-oriented studies is one of the major objectives of the ICBE and thus a great deal of time has been and will continue to be spent in promoting such courses at the undergraduate and graduate levels in universities. With already overcrowded curricula at the undergraduate level, it may not be feasible to introduce separate cross cultural, participation training courses for BA/BSc/BArch candidates. But creation of course modules which can be introduced into ongoing courses by sympathetic faculty members influenced by professional workshops, attendance at professional meetings, etc. may be feasible.

The creation of course modules which can be self-standing as well as linked together is admittedly a compromise between no or little content and the totally integrated, process-oriented course. Course modules consisting of readings, suggested activities, case studies, audiovisual support, and a comprehensive instructor's guide are not easy to create, require substantial funding, and take time to get right. But they are probably the best way of multiplying the desired content and approach from such a modest center and with limited human resources. Funding agencies such as the NEH are comfortable seeing "real" products which can be recommended for use in a variety of settings and which have cost-effectiveness as a consideration.

The problem of adoption is what diffusion of innovation is all about and only through the continued personal efforts of the Center's director and the growing network of trained people (principally participants of the several courses) will adoption of cross cultural methods in the built environment be achieved. This means travel, writing, and courteous arm twisting.

Professional seminars/short courses. These are valuable means of getting the Center's objectives across to working professionals: educators, practicing architects and engineers. The ideas are planted in such seminars and may lead to unexpected results later on when the practioners encounter a problem or situation which makes them recall what the seminar's content was all about. Thus application is at best hit-or-miss, but effective when it occurs.

I am without data on the several in-service professional activities which have been provided by the project director over the life of the FIPSE funding, but feel confident that the presentations at the meetings mentioned in the first annual report went well and were enthusiastically received. Where people are professionally ready to receive new ways of addressing difficult problems, the adoption of new ideas is usually swift and sure. This means that short courses of one to five days are very valuable continuing education devices for working professionals, especially if associated with association annual meetings where an expectation of "what can I learn this year?" is found among the more progressive members.

* *

RECOMMENDATIONS: EDUCATIONAL PROCESS

1. Provide a succinct, highly pertinent reading list and orientation materials in advance of the courses. An additional optional mixture of technical, Southwest travel-oriented, and fiction reading suggestions would allow those with adequate time and interest to go into some depth without creating guilt feelings for those who can't dip into detailed materials.

2. Establish an evaluation mechanism at the beginning of the workshop to ensure that small issues and problems are not magnified by inattention. A suggestion box opened at the end of each day with instant responses made the next morning by the course coordinator is one technique. Another is to have a weekly evaluation session to review the week's events either orally or with a brief questionnaire. A rotating chairperson from the participants makes for a greater sense of involvement in weekly review sessions.

3. Document present course field projects with slides and/or video to aid introducing the project concept to the new participating villages in subsequent years. This will help explain what the students can--and can't--do for the community in the time provided. Also showing the present participating communities the completed documentation can help stimulate discussion as they evaluate the just-completed project from a community perspective.

4. Refine final evaluation instrument so that it is possible to have a mixture of scaled ratings and qualitative remarks. This will allow a better rating of resource persons and more pointed suggestions for improving future courses.

5. Consider hiring a past workshop participant to serve as an assistant course leader, especially for the field trip and team project phases of the workshop. This

PART 2. ICBE AS A RESOURCE CENTER

Resource centers provide information and leadership, and often encourage formal and informal networks of institutions and individuals. The ICBE is in the unique position of consolidating scattered print and human resources, developing individual expertise, and providing the focus for a network of professionals in the built environment who are concerned about intercultural and cross-cultural issues in their profession.

The ICBE is not, however, a lone voice crying in the wilderness of cross-cultural communication. The project director is an active member of the Society for Intercultural Education, Training, and Research (SIETAR). Renewed murmurs are being heard in the schools about America's need for "world education"--a direct result of the concerns of returned Peace Corps Volunteers' and others about our national ignorance of world geography, history, and cultures.

Where the ICBE can be of great value is to monitor these small but growing interests, translate and focus information for use by those who shape our environments, and provide input into the wider society about the role of the built environment in changing societies. This is the familiar "two way street": receiving and adapting information, then giving new information back to the original providers.

How is this abstract information resource role made specific and real aside from providing formal courses and seminars? Some examples:

--Monitoring where and how cross-cultural methods have been applied in the built environment;

--Taking results from such applications and creating case studies;

--Obtaining and/or producing audiovisual and other teaching materials which demonstrate the various aspects of cross-cultural communications as might be applied to environmental design;

--Developing an international network of institutions and people who are interested in and sympathetic with the cross-cultural dimension of architecture, engineering, and planning (especially former course participants);

--Publishing a newsletter related to the topic;

--Interpreting the spatial aspects of cross-cultural communication to those interested in cross-cultural communication but without a background in spatial design and planning.

The requirements for doing all of these activities far exceed the present capacity of the ICBE. However, the more informal resource center functions--especially developing a network of people and institutions and monitoring the news and trends which come out of the network--are possible. This networking role also relates to marketing the ICBE services (discussed later in this report) and keeps the courses' content relevant and up-to-date.

RECOMMENDATIONS: RESOURCE CENTER ROLE

11. The ICBE should compile a list of current periodicals most relevant to its activities, obtain subscription details (including past issues/microform information), and determine which libraries in the Santa Fe area carry these publications. The project director is in a unique position to know which publications can be recommended for staying abreast of this rapidly evolving area of interest. This periodicals list and where to obtain them locally and through subscription would be a most helpful document for those wishing to do research as well as working professionals who want to stay current with new developments.

12. In a similar exercise, the ICBE should compile a bibliography of books and nonprint materials which are of value for built environmental scholars and professionals wishing to gain knowledge on their own about cross-cultural aspects of the built environment. This exercise is sometimes referred to as "the five foot book list" (or some other dimension, where the core scholarship on the topic fits in a space X feet/meters wide.) Presumably, much of this compilation has been made for benefit of the the several ICBE courses already offered.

13. Development of ICBE's existing master contact and mailing list should include the ability to sort people into sub-networks such as geographic area specialties, various engineering categories, architects, marketing only, past participant, third world individual, etc.. This ability to sort on sub-categories allows better targeting of information, savings on marketing, and gives a better definition of those included in the ICBE network.

14. Print and nonprint documentation of cross-cultural built environment planning should be fostered by encouraging past ICBE course participants to describe/photograph projects they are engaged in and then submitting the results to the Center for its resource collection. The ICBE can expand to other network sub-categories (e.g. innovative training methods, geographic areas) as experience demonstrates how best to encourage and catalog such documentation.

15. The existing plan to publish a newsletter should be activated as soon as feasible as an information device as well as an aid to fund raising and marketing. This can be a modest effort but serves to foster the network and knowledge of the Center. A mixture of news, commentary, and technical information is suggested as the best way to maintain interest. The first issue should be free, if possible, and the subsequent issues (quarterly?) available for a modest fee to ensure cost of mailing and printing plus better readership than as a free service.

16. The sponsorship of monographs and case studies by the Center should be considered--in cooperation with another institution if funding is too difficult. This sponsorship offers researchers and practitioners an outlet for writing about their research and serious professional work and expands the literature of the field. The Center will quickly be seen as a serious educational center which does more than run courses.

PART 3. MARKETING OF SERVICES AND MATERIALS

The previous sections dealt with providing a variety of services as an educational services resource center. With basic funding from the Fund for the Improvement of Post Secondary Education, it is feasible to provide courses, encourage networking, and produce a modest quantity of educational materials without spending a great deal of time and money on marketing. But in the final months before the completion of the FIPSE project, the project director clearly recognizes the need for increased marketing activity. This writer cannot provide in-depth guidance in marketing, but can make a few observations based upon experience as an independent photographer, consultant, and scholar who has managed to survive by a combination of frugality, attention to quality, active seeking of contacts, and luck.

Past and present marketing by ICBE has been principally sending printed materials to a variety of university architecture departments, professional acquaintances of the project director, and personal contacts at professional meetings and symposia. This modest but effective marketing has brought in sufficient students to make the courses viable given the FIPSE underpinning of some $68,000 as an annual average.

In order for the Center to exist on its own, a financial plan is required which includes a marketing component. An estimate of the right level of marketing costs is going to take a great deal of thought by Center staff and advice from marketing specialists (already actively considered). Money spent in an ineffective way is lost; even spent effectively, too little money can also be wasted by not reaching enough potential center users.

Marketing is oriented toward two general audiences: donors to the Center's continued operation and programs, and users of the Center's services. The most likely donors include private foundations, public funding authorities such as NEH, and companies with a history of contributing to educational endeavors. This report does not go into the delicate art of marketing for donors and fund raising. I would note that the State Library in Santa Fe has extensive reference materials on foundations, current donation patterns, and other data which can help in preparing highly targeted funding proposals for foundations.

The possible marketing ingredients to users include direct mail, personal appearances, selected periodical advertising, and telephoning personal contacts (including former participants). By far the best marketing method is word-of-mouth and using personal contacts. But there is reinforcement to those colleagues who would assist in recruiting course participants, purchase materials, and take a newsletter subscription if advertisements appear in their journals and a poster appears on the departmental bulletin board. So a comprehensive strategy to attract course attenders through traditional means is basically established. The next step is to expand this word-of-mouth, informal strategy by continuing to develop new contacts and maintain the old ones through personal appearances, letters, and phone calls. Thus an informal strategy can be converted into specific budget figures.

But to ensure a good selection of course participants, widen knowledge of the Center's services, and stimulate interest in cross-cultural planning, other marketing stratagies must be explored to reach beyond the familiar personal contact arena. An example is making contact with foreign students studying in the USA either on their own or under sponsorship by their own country or a development agency such as USAID.

In order for USAID to support participants for the ICBE summer workshop, the paperwork authorizing funds must be accomplished in advance--even before the person

leaves the country or immediately upon arrival for, say, a two year masters' program. This means that the Center must do enough exploratory work, preferably in Washington, to yield sufficient data about the value of trying to "program" USAID-supported students for ICBE summer (or other) courses. This is typical of the pattern for extended marketing efforts:

1. Conduct exploratory research about how best to reach a target audience;

2. Make cost benefit estimates of a given marketing effort, taking into consideration long term effects such as increased name recognition, cultivating a sense of "establishment", and reinforcement of existing word-of-mouth marketing;

3. Decide how much time, effort, and money should be spent on a specific marketing effort—if at all;

4. Pretest all materials before final production and distribution to detect simple errors, ambiguous writing and graphics, weak "image", appropriateness for target audiences, and any other factors which might keep the materials from conveying the intended message.

Another potential source of participants includes those working in architectural, engineering, and planning firms. These possible participants require the continuing education short courses which have been offered by the Center on an ad hoc basis. Marketing of such courses is another level of sophistication as there is intense competition for time and money devoted to inservice training by a variety of private and university groups.

It may be desirable to develop a "menu" of short courses which are graduated in sophistication and subject matter so that a sequence of short courses can be offered over a period of time. Such a matrix might be:

AUDIENCE LEVEL	CONTENT		
	Subject 1	Subject 2	Subject 3
INTRODUCTORY	I-1	I-2	I-3
ADVANCED	A-1	A-2	A-3

"Subjects" can also be geographic area surveys. From this matrix, it might be possible to develop tailor-made training programs for firms which are interested in improving their overseas performance. A marketing strategy would be to offer several workshops sequenced over a given length of time (rather than the more typical one shot workshop) and tailored to the needs and experience of the company. A commitment from both the ICBE and the company on a sequence of workshops with approximate dates and locations simplifies planning a year's activities.

RECOMMENDATIONS: MARKETING

17. The Center should immediately develop a comprehensive marketing plan which identifies the several target audiences, how to reach them, and how much time, effort, and funds should be devoted to marketing. It would seem prudent to develop three levels of marketing effort, applying the appropriate marketing level to fit available financial resources in a given period.

18. Emphasis should be placed on the word-of-mouth, personal contact marketing approach as this is the most developed, cheapest, and most cost effective marketing method available to the Center. It also fits the nature of an educational center and demonstrates to potential donors that marketing is being conducted, but that costs of marketing are not detracting from the provision of basic services.

19. Potential new markets should be identified, followed by a systematic strategy for reaching these new markets. Four points were presented earlier to assist in formulating this strategy.

20. Consideration should be given to upgrading existing materials so that a clear "image" of the Center is established. This would include selecting distinctive paper stock, refining the existing graphics, designing a unique logo, and ensuring that the Center's identity is maintained on all items coming from the Center.

21. Specific consideration should be given to marketing the Center's services and materials to private firms engaged in overseas work. This consideration includes conducting a training needs analysis, creating custom courses in sequences, and possibly adapting some Center materials into self-study modules which can be marketed as followup of conventional courses/workshops.

22. As not all of these activities can be accomplished by a director and a half time associate, the marketing plan should specifically provide for an estimate of how much time might be required for a marketing/network facilitator, what skills would be needed by such a person, and how much this person would be paid. This is fulfillment of the old saying, "It takes money to make money".

PART 4. MANAGEMENT, LOGISTICS, AND ADMINISTRATIVE MATTERS

Management.

When I consider the ICBE from a management perspective, I think of the late Kurt Schumacher's provocative book, Small Is Beautiful. That is, with a minimum amount of running cost, specific services are provided by the ICBE equal to or better than those provided at large, distinguished universities such as MIT which take from 50-200% per project in overhead fees alone, aside from overpriced tuition and housing. Indeed, the growth over the past decade of independent educational centers serving specific needs is an underappreciated educational phenomenon in the USA.

Affiliation with the University of Wisconsin at Milwaukee (UWM) was necessary to be credible in the eyes of the project donors. However, it was clear that this affiliation had negative effects on the administration of the Center. Indeed, this marriage of convenience was doomed from the start as a two person office 1,400 miles away can operate on simpler procedures than a major urban university which has to conform to elaborate state-mandated bureaucratic procedures.

Having indicated my sympathies with the "Ma & Pa" level of service providers, I hasten to add that small scale operations are not inherently more efficient, more responsive, more flexible, more adaptive, or more creative than larger-sized bodies. The owner of a one person business can be just as bloody-minded, bumbling, and rigid in serving the public as a large government agency. The difference is that the small operation survives or fails based on the quality and need for certain service; a bureaucracy rumbles on from its own momentum, regulations, and constitutional authority.

The ICBE with a full time director, part time administrative assistant, and resource persons used as needed on an honorarium basis should have a a simple management structure. There has been the complication of UWM handling the finances and personnel policy. That was a given as indicated before but will not be a factor in the future.

What will be a factor is a change in status from an activity of UWM to an independent, non-profit educational organization acting under IRS section 501 (c)(3). This will require a board of directors, an annual general meeting, and regular reporting of activities to state and federal revenue offices (discussed in greater detail at the end of this section below). With funding not being assured beyond the three year FIPSE period, the ICBE will have to run a tight operation with immediate knowledge and control of revenues and costs.

The role of the director will change. Fund raising and financial concerns will take much more of his time in the future compared to the immediate past and present during the FIPSE funding period. More discussions with potential donors, preparation of funding proposals, diversification of activities, and careful attention to enrollment levels can be expected. If funding is generous, additional personnel—hired for a specific task or added permanently—will be needed. Time will be required for planning, marketing, and other duties which are not related to teaching or writing. More management duties for the director in turn means more work for the present half-time administrative assistant.

"Administrative assistant" is a misleading title. More appropriate to the level of duties performed—especially when the director is away for out-of-town and international obligations—is the title "Executive Officer".

There may also be a need to increase the scope of work to a full time position rather than the present 20 hours per week.

Maintaining financial control, especially cash flow monitoring, may require a bookkeeper's services for a few hours each week. The logistics of the summer course and the need to have close contact with the participants may require the services of a course coordinator resident in the dormitories. Other persons might be hired for various tasks such as developing course modules, coordinating the networking, assisting with marketing advice, and general office duties. Student categories such as work-study students or interns are possibilities for staffing on a small budget.

A key ingredient in any organization is communication between the various staff members. Even with a two person office, a regular time set aside for discussion of impending events, division of responsibilities, and problem solving is needed. With the Center's director in and out of the office attending to a host of obligations--from teaching to meeting with prospective donors—the Executive Officer is left to handle much of the routine business of the Center. This includes logistics of the courses, answering inquiries, and making decisions affecting virtually everything but key policy matters.

One means of formulating policy and assisting the staff in problem-solving is to form a small board of directors or advisory board for the Center which meets anywhere from two to four times a year. The group's primary value is providing a forum for sharing ideas. Regular meetings require formal presentation of what has gone on and what is planned for the coming months. The group need not have any particular powers, but could serve as an ideas roundtable. It would be a source of local talent and contacts assisting the staff in times of intellectual—and physical—weariness.

Registering as a non-profit corporation in the State of New Mexico is not a difficult task and does not require a lawyer. Purchase of the laws pertaining to non-profit corporations can be made at the State Supreme Court building; the one page form can be obtained from the State Corporation Commission offices in the PERA Building. Becoming a state recognized non-profit educational corporation is a necessary but not sufficient condition to receiving IRS tax exempt, tax deductible status under their Section 501 (3)(c). Careful reading of the regulations and subsequent drafting of bylaws and promotional materials to conform to the IRS language and guidelines for Section 501 (3)(c) will assure the Center of IRS acceptance as a tax exempt, tax deductible institution.

A good argument can be made for doing this basic work of corporate registration, bylaws drafting, and drafting the IRS tax exempt application before asking a lawyer to review the various documents. If a lawyer starts from scratch, the costs could quickly mount to nearly $1,000. If all the basic work is done ahead of time and carefully corresponds to the IRS regulations, guidelines, and language as stated in their publications related to State and IRS registration, there is no reason why legal fees should go beyond $300. A preliminary call to a lawyer--perhaps one used in the past and deemed competent—would provide a feeling if this route is satisfactory. This was the route used by the consultants cooperative association with which I am affiliated and proved quite satisfactory.

It would be strategically useful to have a lawyer's stationery and signature for a covering letter submitting the application to the IRS (Form 1023). Various supporting documents showing that the Center was a part of UWM, had received a FIPSE grant, etc. would be highly useful as supporting evidence that the Center is a legitimate, straightforward case for the IRS to consider. In other words, the Center

should try to make the IRS decision as easy as possible, structuring all documents to show that the Center is a mainstream educational service center which is obviously what the Congress and the IRS meant to provide for under the tax exempt laws and regulations.

The IRS obviously has a check list to scrutinize applications based on their regulations and the application's various questions. The Center should be able to conform to all the necessary items on the check list by applying classic "testmanship" learned from grade school onwards. The time for receiving an affirmative decision on the 501 (3)(c) application can range, I am told, from two to six months. They may require supplementary information in the meantime. Thus sending as much as possible at the time of application is advised.

One other straightforward IRS task is to obtain an Employer Identification Number--similar to a social security number--which should be obtained following receipt of corporate status from New Mexico by filling out IRS Form SS-4. Similarly, it may be necessary to register with the NM Department of Revenue following non-profit corporate registration.

Logistics.

The physical arrangements for the summer courses appear satisfactory given the level of expenditures ($60 a week for a dormitory room, $200 for the 1987 six week summer course, food arranged individually). Clearly it was easier to have camping field trips with a dozen people (including teacher and guides) in 1987 compared with more than two dozen in 1986. Transport will always be a headache unless all of the participants have their own vehicles in satisfactory running order. Use of donated classrooms--or at least a classroom at nominal cost--seems possible during the summer.

If professional workshops were to be scheduled for Santa Fe, presumably a hotel conference room would be rented for the occasion or space could be donated by a state agency as in early 1987. Semester classes at UNM operate as ordinary university classes and aside from commuting by the project director are not a logistical concern for the Center.

One logistical problem associated with all of the Center courses is how to make good use of audiovisual support. At the minimum, this means having a classroom which can be darkened (especially for slides), has a chalkboard, and which can be secured in the event a video tape recorder and monitor are used regularly. The easiest solution is to use classrooms in buildings where such support can be provided by the institution (as with the use of the Institute for American Indian Art's library for the 1987 summer course). This is not always possible. Other supplies and equipment are also required. A lockable steel cabinet which can be moved into the temporary classroom might prove useful.

It may be necessary in the future to consider hiring a temporary facility which would serve as a classroom. Such facilities range from a short lease of a vacant store in a shopping center to an office in an office block rented on a weekly basis. This would also entail hiring or buying tables, chairs, chalkboard, and a flowerpot or two to breakup the starkness of the room. One advantage of such an arrangement is that it could be open to the participants around the clock. (Parenthetically, I would strongly urge borrowing or purchasing a table and four chairs for the Center's office so that meetings with visitors can be held more comfortably for all concerned.)

In short, the "university without walls" model makes logistics of running short courses more tricky than if the Center were part of an ongoing institution. But when participants are paying very reasonable service and room fees and are informed ahead of time of the arrangements, they are likely to be accepting of the sometimes awkward logistics.

Administrative.

The Center purchased a basic-level business computer at the end of 1986 and put it into use in September, 1987, when the present administrative assistant, Dianna Goeltze, was hired. The Center has a number of applications for the computer which is already easing correspondence, financial, marketing, course materials, and report writing needs. Further expansion of the computer system will likely be necessary as the needs expand. Initially a modem should be considered; desktop publishing facilities should be considered if funds permit.

With the purchase of a modem and appropriate software, it is possible to subscribe to MCI Mail for $18 a year and use the computer as a telex machine for sending and receiving domestic and international telex messages. Mailgram-style letters can be sent overnight (including key international locations) or delivered via courier to certain large cities in four hours by MCI Mail. Aside from the reasonable annual subscription rate, payment is made only for each particular service used.

With increased attention to fund raising and marketing, a review of expanded telephone needs is in order. The possibilities include adding telephone company optional services such as call waiting, three way calling, and call forwarding. Extensive communication by computer might require an unlisted second line for computer and outgoing calls use only.

The Center's first annual report discussed creating an office management plan.but this has been not specifically implemented. In a two person office, this may seem like an unnecessary undertaking. However, it is desirable to inventory all of the tasks which are undertaken throughout the year and decide if current methods are efficient and cost effective or whether they need modification to improve performance. Also included in this management plan is the previously discussed need for regular, formal staff communication sessions which would result in updated check lists of things to do, possible problems which need attention now or sometime in the future, and an exchange of views on solutions. This will assist the person "holding the fort" in the absence of the other staff member to make decisions and be knowledgeable about what callers and visitors require by way of information.

A second inventory would be of present physical facilities to determine if increased marketing, materials production, and possibly additional staff will require more shelves, desks and chairs, bookcases, and office equipment. A small conference table with chairs would provide greater comfort when receiving guests or holding meetings. It could also double as a work table for mailings, collating handouts, etc.

RECOMMENDATIONS: MANAGEMENT, LOGISTICS, AND ADMINISTRATIVE

23. Several categories of management plans are required as the Center makes the transition to an independent non-profit educational center: a fund raising plan, a marketing plan, a financial plan, and an office management plan. These comprise an overall business plan but are indicated here as separate because they will be created at different times with different degrees of urgency.

24. As part of the overall planning for an independent center, the role of the present half time administrative assistant should be carefully reviewed with strong consideration given to expanding the job description and renaming the position "Executive Officer" to more accurately reflect the nature of the work. This clearly puts pressure on the budget, but this position is so critical to the day-to-day success of the Center that all possible consideration should be given to making sure that it is filled by the ablest person available.

25. With the expansion of fund raising and marketing activities, support personnel may be required on a casual hourly, contractual, or other basis. However, no additional permanent staff should be hired at this time.

26. Registration as a non-profit educational corporation will require designating a board of directors. This should be seen as an opportunity for having regular input and reflection from the equivalent of an advisory board assisting the staff in carrying out Center objectives.

27. With expansion of audiovisual materials to support courses, purchase of basic audiovisual equipment and relevant materials is advised as a means of ensuring their use when borrowed equipment is not available. Such purchases are not cheap but $3,000 would be adequate for a basic video camera, slide shows, overhead projection, and portable chalk/white board. A VCR has already been acquired.

28. Similarly, expansion of computer facilities should be considered including the purchase of a modem and communications software for access to telex and electronic mail facilities. An office management plan would also include additional computer applications and consideration of necessary computer upgrading.

29. Telephone needs should be studied with an eye to adding convenience services and a possible second line if funds permit. This means a careful review of current usage and needs before making any expensive decisions.

30. A physical facilities needs survey should be carried out with an eye to improving storage, work space, and informal meeting accommodation.

SUMMARY

The International Center for Built Environment offers valuable and unique services to architects, engineers, and planners. The taxpayers' money has been well spent; the participants in the several courses supported by the project have received ample value for money. I can clearly confirm that FIPSE's decision to fund the introduction of cross-cultural communication and participatory principles into the training of built environment professionals by supporting the Center has proven sound.

Determining the generally positive results of what the Center has done with a minimum of staff and a modest amount of money has not been difficult. More tricky is looking backward to determine lessons learned and then forward to suggest how these lessons might be applied. This is the essence of my view of formative evaluation. I have thus tried to project ahead and see what might be done in the future when considering the Center as separate from the University of Wisconsin at Milwaukee and without the FIPSE funding. I hope this report's list of recommendations assists this process of transition from the comfortable shelters of two institutions to the bracing world of independent status.